Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A magnetic recording medium comprising:

a recording layer which is formed of a ferromagnetic material;

a ferromagnetic atom-rich layer which is formed of a ferromagnetic material having a high ferromagnetic atom concentration as compared with the ferromagnetic material for forming the recording layer; and

a non-magnetic layer which exists between the recording layer and the ferromagnetic atom-rich layer.layer;

wherein the ferromagnetic atom-rich layer is formed of a cobalt alloy containing 62% to 83% of cobalt.

2. (Currently Amended) The magnetic recording medium according to claim 1, wherein the ferromagnetic atom-rich layer is formed of one selected from the group consisting of Co, Ni, Fe, and CoNiFe alloy.cobalt alloy is a CoPt alloy.

- 3. (Currently Amended) The magnetic recording medium according to claim 1, wherein the ferromagnetic atom-rich layer is formed of an alloy of a transition metal and one selected from the group consisting of Co, Ni, and Fe.cobalt alloy is a CoCr alloy.
- 4. (Original) The magnetic recording medium according to claim 1, further comprising a magnetization-stabilizing layer which stabilizes magnetization of the recording layer, wherein the ferromagnetic atom-rich layer is positioned between the magnetization-stabilizing layer and the recording layer, and the ferromagnetic atom-rich layer functions as a first enhancing layer which increases exchange coupling between the magnetization-stabilizing layer and the recording layer.
 - 5. (Original) The magnetic recording medium according to claim 4, further

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comprising a second enhancing layer which increases exchange coupling between the recording layer and the ferromagnetic atom-rich layer, the second enhancing layer being disposed between the recording layer and the non-magnetic layer.

- 6. (Original) The magnetic recording medium according to claim 4, wherein the recording layer is formed of a material containing Co, Ni, or Fe, and the first enhancing layer is formed of a material containing Co, Ni, or Fe at a concentration higher than a concentration in the recording layer.
- 7. (Original) The magnetic recording medium according to claim 6, wherein the recording layer contains Boron.
- 8. (Original) The magnetic recording medium according to claim 4, wherein the enhancing layer has a film thickness of 0.2 to 2 nm.
- 9. (Original) The magnetic recording medium according to claim 1, wherein the non-magnetic layer is formed of Ru.
- the magnetization-stabilizing layer includes a first magnetization-stabilizing layer and a second magnetization-stabilizing layer, a second non-magnetic layer is provided between the first magnetization-stabilizing layer and the second magnetization-stabilizing layer, and an auxiliary enhancing layer, which increases exchange coupling between the first magnetization-stabilizing layer and the second magnetization-stabilizing layer, is provided at least at one of positions between the first magnetization-stabilizing layer and the second non-magnetic layer and between the second non-magnetic layer and the second magnetization-stabilizing layer.
- 11. (Original) The magnetic recording medium according to claim 10, wherein the auxiliary enhancing layer includes a first auxiliary enhancing layer which is formed between the first magnetization-stabilizing layer and the second non-magnetic layer, and a



second ferromagnetic atom-rich layer which is formed between the second non-magnetic layer and the second magnetization-stabilizing layer.

- 12. (Original) The magnetic recording medium according to claim 1, further comprising a substrate, a second non-magnetic layer, and a magnetization-stabilizing layer which is positioned therebetween, which is formed of a ferromagnetic material, and which stabilizes magnetization of the recording layer, wherein the ferromagnetic atom-rich layer is positioned on a side opposite to the substrate with respect to the second non-magnetic layer.
- 13. (Original) The magnetic recording medium according to claim 1, further comprising a substrate, a second non-magnetic layer, and a second ferromagnetic atom-rich layer which is positioned therebetween, wherein the ferromagnetic atom-rich layer is positioned on a side opposite to the substrate with respect to the second non-magnetic layer.

 $\int 14-23$. (Canceled)

- 24. (Original) The magnetic recording medium according to claim 1, wherein the recording layer has magnetization in an in-plane direction.
 - [25. (Canceled)]
- 26. (Original) The magnetic recording medium according to claim 1, wherein a magnetization curve of the magnetic recording medium with respect to an external magnetic field exhibits a hysteresis loop, a point, at which a rate of change of magnetization with respect to the external magnetic field exhibits a local maximum when the external magnetic field is lowered after magnetization is saturated, exists in a positive area of the external magnetic field, and an exchange coupling magnetic field, which is determined from the magnetization curve, is not less than 1 kOe.
 - [27. (Canceled)]
 - 28. (Currently Amended) A magnetic recording medium comprising: a recording layer which is formed of a ferromagnetic material;



a magnetization-stabilizing layer which is formed of a ferromagnetic material and which stabilizes magnetization of the recording layer;

a non-magnetic layer which exists between the recording layer and the magnetization-stabilizing layer; and

a ferromagnetic atom-rich layer which exists at least at one of positions between the non-magnetic layer and the recording layer and between the non-magnetic layer and the magnetization-stabilizing layer and which is formed of a ferromagnetic material having a ferromagnetic atom concentration higher than that of the ferromagnetic material for forming the recording layer.layer;

wherein the ferromagnetic atom-rich layer is formed of a cobalt alloy containing 62% to 83% of cobalt.

(Currently Amended) A magnetic recording apparatus comprising:a magnetic recording medium;

a magnetic head which is used to record or reproduce information on the magnetic recording medium; and

a driving unit which drives the magnetic recording medium with respect to the magnetic head, wherein the magnetic recording medium comprises:

a recording layer which is formed of a ferromagnetic material;

a ferromagnetic atom-rich layer which is formed of a ferromagnetic material having a high ferromagnetic atom concentration as compared with the ferromagnetic material for forming the recording layer; and

a non-magnetic layer which exists between the recording layer and the ferromagnetic atom-rich layer.layer;

wherein the ferromagnetic atom-rich layer is formed of a cobalt alloy containing 62% to 83% of cobalt.



- [30. (Canceled)]
- 31. (Currently Amended) A magnetic recording apparatus comprising: a magnetic recording medium;

a magnetic head which is used to record or reproduce information on the magnetic recording medium; and

a driving unit which drives the magnetic recording medium with respect to the magnetic head, wherein the magnetic recording medium comprises:

a recording layer which is formed of a ferromagnetic material;

a magnetization-stabilizing layer which is formed of a ferromagnetic material and which stabilizes magnetization of the recording layer;

a non-magnetic layer which exists between the recording layer and the magnetization-stabilizing layer; and

a ferromagnetic atom-rich layer which exists at least at one of positions between the non-magnetic layer and the recording layer and between the non-magnetic layer and the magnetization-stabilizing layer and which is formed of a ferromagnetic material having a ferromagnetic atom concentration higher than that of the ferromagnetic material for forming the recording layer.layer:

wherein the ferromagnetic atom-rich layer is formed of a cobalt alloy containing 62% to 83% of cobalt.

